

# Occupancy Sensor Infrared Ceiling Sensor

**OSC04-IOW**  
**OSC15-IOW**

The all-digital & microprocessor based OSCxx-I is the most advanced infrared ceiling sensor available. Self-calibrating sensitivity and timer allow the installer to "install & forget."

## THE OSCXX-I OCCUPANCY DETECTOR

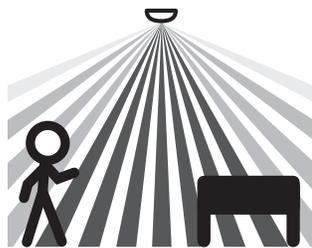
- PASSIVE INFRARED TECHNOLOGY (PIR)
- SIMPLE, FAST INSTALLATION
- SELF-ADJUSTING
- DIGITAL TECHNOLOGY, COMPLETE RELIABILITY
- PHOTOCELL CONTROL
- IMMUNITY TO AIR CURRENTS

## GENERAL OPERATION

The OSCxx-IOW Infrared Ceiling Sensor is a low voltage occupancy detector that works in conjunction with the Leviton OSPxx power pack to control lighting. The detector's main function is to turn the lights on or maintain the lights on while movement is detected within the sensor's range and to turn the lights off when the space is left unoccupied.

The sensor uses a small semiconductor heat detector that resides behind a multi-zone optical lens. This Fresnel lens establishes dozens of zones of detection. The sensor is sensitive to the heat emitted by the human body. In order to trigger the sensor, the source of heat must move from one zone of sensing to another. Non-moving hot objects will not cause the lights to turn on.

*At a distance close to the sensor, slight movement can be sensed. As the distance away from the sensed increases, the space between the zones of sensitivity increases, and therefore the amount of motion required to trigger the sensor increases.*



## FEATURES

**Small Size:** Installed sensor appears almost invisible.

**Fast, Simple Installation:** Easy ceiling mount, three wire connection (low voltage) and twist-lock sensor attachment.

**Self-Adapting:** An internal microprocessor continually analyzes, evaluates and adjusts settings. Performance is kept at a maximum and user complaints are eliminated.

**Maximum Reliability, Low Cost:** All digital circuitry uses a minimum of components.

**Timer Setting:** Automatic - 30s to 30 min. Manual and Automatic. Test mode - 6 sec.

**Ambient Light Recognition:** A photocell prevents lights from turning on when the room is adequately lit by natural light.

**Non-Volatile Memory:** Learned and adjusted settings saved in protected memory are not lost during power outages.

## HOW THE OSC04-I AUTOMATICALLY ADAPTS

Condition	Example	Adaptive Reaction
Timer Left In Test Mode - The sensor remains in an 6 sec. test mode.	An installer accidentally leaves the sensor in the 6 sec. timer test mode and the lights may go off or on every 6 sec.	The sensor automatically resets the timer to 10 min after 15 min of test mode.
False-On -The sensor incorrectly turns the lights on.	The sensor detects movement in the corridor or hallway and the room lights turn on.	After an initial movement is sensed, if another movement is not sensed within the timer setting then the delayed off time setting is automatically reduced.
False-Off -The sensor incorrectly turns the lights off.	The sensor does not detect movement because an occupant sits virtually motionless at a desk and the lights turn off.	If motion is sensed within a short period after the lights go off, then the current delayed off-time setting is increased.

*A dedicated internal microprocessor continually analyzes the room environment and adjusts itself automatically. The internal timer and infrared sensitivity are automatically adjusted. Once installed, the OSCxx does not require manual adjustment or calibration.*

**OSC04-IOW OSC15-IOW**

## LEVITON SPECIFICATION SUBMITTAL

JOB NAME:	CATALOG NUMBERS:		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
JOB NUMBER:	<input type="text"/>	<input type="text"/>	<input type="text"/>

# Product Specifications

# OSC04-IOW OSC15-IOW

## PRODUCT SPECIFICATIONS

Models			
Part Number	Lens Type	Coverage	Additional Features
OSC04-IOW	High Density	450 sq. ft.	Photocell
OSC15-IOW	Extended Range	1500 sq. ft.	Photocell

## CONTROLS

**PIR (Infrared Sensitivity):** High to low.

**Timer Adjustment (Manual):** 30s - 30 min. - Factory set 10 min.

**PC (Photocell Adjustment):** 20 to 3,000 Lux - Factory set 3,000 Lux (Disable photocell)

## DIP switch settings

Switch	Switch Functions		Switch Settings
	Bank A	OFF	ON
A1	N/A	—	—
A2	N/A	—	—
A3	Manual Mode	Auto Adapting Enabled	Auto Adapting Disabled
A4	Walk-Thru Disable	Walk-Thru Enabled	Walk-Thru Disabled
<b>Bank B</b>			
B1	Override to On	Auto Mode	Lights forced On
B2	Override to Off	Auto Mode	Lights forced Off
B3	Test Mode	OFF→ON→OFF	Enter/Exit Test Mode
B4	LED Disable	LEDS Enabled	LEDS Disabled

## INDICATOR

**Red LED Lamp:** Infrared motion.

## SPECIFICATIONS

**Construction:** Housing -- Rugged, high-impact, injection molded plastic. Color coded leads are 6" long (16.24 cm).

**Size & Weight:** 4.5" dia., 1.5" height; 5 oz. (114 mm dia., 38 mm height; 142 g).

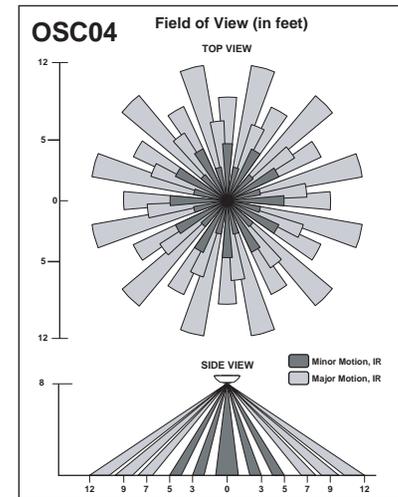
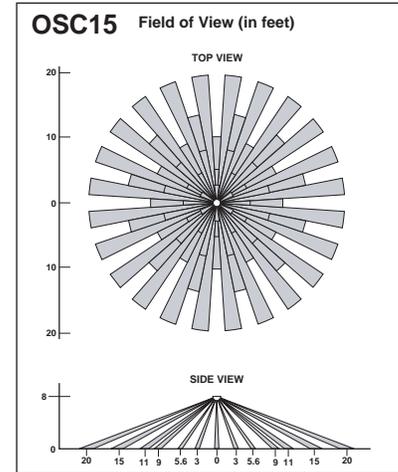
**Power Requirements:** 24 VDC, 20mA from the OSPxx-series power pack.

**Output:** 24 VDC active high logic control signal with short circuit protection.

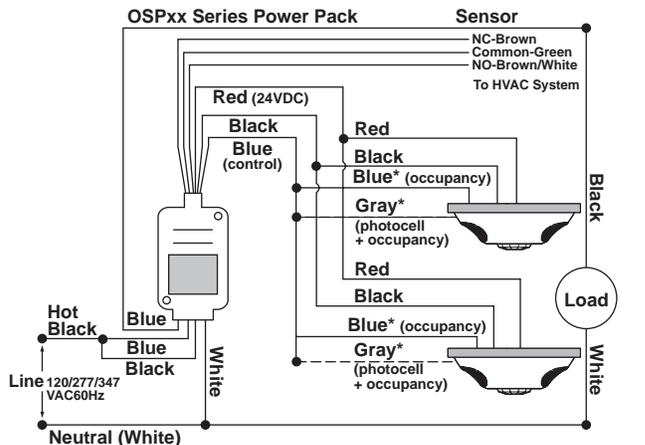
**Operating Environment:** 32°F to 104°F (0°C to 40°C); 0% to 95% relative humidity, non-condensing. For indoor use only.

**Warranty:** 5 yrs.

## RANGES



## PHYSICAL WIRING



\*When the photocell function is not being used, connect the Blue Occupancy Sensor lead to the Blue Power Pack lead. When using the Photocell function, connect the Gray Occupancy Sensor lead to the Blue Power pack lead—Do not use the Blue Occupancy Sensor lead for the photocell function.

**LEVITON** SPECIFICATION SUBMITTAL

JOB NAME:	CATALOG NUMBERS:
<input type="text"/>	<input type="text"/>
JOB NUMBER:	<input type="text"/>

Leviton Mfg. Co., Inc.  
59-25 Little Neck Pkwy • Little Neck, NY 11362-2591 • Tech Line: 1-800-824-3005 • Fax: 1-800-832-9538

Visit our Website at: [www.leviton.com](http://www.leviton.com)

G-6987A/C4-1p

**LEVITON**  
Building a Connected World